

The mixture was heated rapidly to 130°C under a gentle stream of nitrogen, then the temperature was raised gradually to 190°C over the course of 6 hours, during which the water of condensation formed was removed by
5 distillation.

This gave the polyester (B2) having an acid number of 26, which solidified on cooling and gave non-caking powders on grinding.

10

Preparation example 4

The preparation of polyacrylate (A1) containing structural units I and photoinitiator groups II

15

243 g of isopropanol and
243 g of toluene

were weighed out into a stirred flask equipped with
20 heater, reflux condenser and nitrogen feed and were heated to reflux (about 85°C); then

300 g of dihydrodicyclopentadienyl acrylate,
370 g of methyl methacrylate,
25 120 g of glycidyl methacrylate,
219 g of butyl acrylate, and
10 g of mercaptoethanol

were added from a dropping funnel over the course of two hours, and

5 30 g of Wako® V 59 (from Wako, azo initiator) and
180 g of toluene

were added from a second dropping funnel over the course of two and a half hours. The batch was
10 polymerized at reflux for 2 hours. The resulting reaction mixture was cooled to about 50°C. Then

166 g of 4-hydroxybenzophenone and
1 g of dimethylaminopyridine
15 were added.

The condenser was then swapped for a top-mounted distillation attachment. The temperature was raised to
20 160°C over the course of 8 hours, during which the solvent was removed by distillation. Then reduced pressure was applied and the reaction mixture was held at 160°C for a further 2 hours. This gave a melt of the polyacrylate (A1), which solidified when poured out
25 onto aluminum foil and after grinding gave blocking-resistant powders at 25°C. The resin had a melting

point of 62°C and a glass transition temperature of 52°C, measured by means of the DSC method.

Preparation example 5

5

The preparation of polyacrylate (A2) containing structural units I

243 g of isopropanol and

10 243 g of toluene

were weighed out into a stirred flask equipped with heater, reflux condenser and nitrogen feed and were heated to reflux (about 85°C); then

15

300 g of dihydrodicyclopentadienyl acrylate,

460 g of methyl methacrylate,

249 g of butyl acrylate, and

10 g of mercaptoethanol

20

were added from a dropping funnel over the course of two hours, and

30 g of Wako® V 59 (from Wako, azo initiator) and

25 180 g of toluene